U.S. Department of the Interior
Bureau of Land Management
White River Field Office
73544 Hwy 64
Meeker, CO 81641

ENVIRONMENTAL ASSESSMENT

NUMBER: CO-110-2006-197-EA

CASEFILE/PROJECT NUMBER (optional):

PROJECT NAME: Cricket Greater Sage-Grouse Nesting Habitat Enhancement

LEGAL DESCRIPTION:

Legal Description				
Allotment Name	No.	Twp.	Range	Section(s)/Lots or Portions Of
Red Rocks	6371	6N	104W	24, 25
Cricket	6300	5N	104W	1, 2
		6N	104W	23, 24, 25, 26, 35, 36

APPLICANT: USDI, Bureau of Land Management – White River Field Office

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

Background/Introduction: The BLM is responsible for the management of half of all remaining sagebrush (*Artemisia* sp.) habitat in the United States and over a third available sagebrush habitat in Colorado. Due to the BLM's stewardship of much of the remaining sagebrush habitat, its management of those habitats will have a substantial impact on the conservation of Greater sage-grouse (*Centrocercus urophasianus*, hereafter "sage-grouse"). Declines in continental sage-grouse populations have prompted numerous listing petitions by environmental interests. In Colorado, and specifically on Blue Mountain, sage-grouse populations have mirrored this general decline.

In addition to sagebrush, the habitat used for productive nesting and brood-rearing also includes important grass and forb requirements. While sage-grouse have been known to nest under other species of shrubs, nest success is higher when they nest under sagebrush that is 40-80 cm (16-32 in) tall. Sagebrush canopy cover at productive nesting habitats ranges from 15% to 25%. Sage-grouse rely on sagebrush for both cover and food. Where precipitation and soil conditions allow, grass should be managed for an average height of at least 18cm (7 in) with a canopy cover of at least 15% (Connelly et al. 2000). Increased grass height, and thus increased visual obstruction, results in lower nest predation rates. Forbs are a critical component of both the hen's pre-laying

diet as well as the diet of chicks. Forbs have been shown to increase the dietary protein intake of pre-laying hens which can have considerable impacts on clutch size, nest success, and overall chick survival. The diet of sage-grouse chicks includes over 30 different genera of forbs. Forbs should be managed so that there is a diversity of forbs at a minimum canopy cover of 10%.

A. Proposed Action: Stands of big sagebrush (*Artemisia tridentate*) that are comprised predominantly of sagebrush >100 cm (39 in) tall would be cut to a height of 20-25 cm (8-10 in) using a brushbeater. Brushbeating would be applied to about 63 ha (156 acres) of upland sagebrush stands in the Cricket and Red Rocks allotments in extreme western Moffat County. To mimic natural fire patterns, the treatments would be applied in patches instead of strips. Patch size varies from 0.7 ha (1.8 acres) to 18.5 ha (46 acres) and all patches are within 3.5 km (2.2 miles) of an active sage-grouse lek.

The brushbeater would be pulled by a rubber-tired tractor that would access 8 of 10 units from existing roads or two-tracks. The remaining 2 small treatment areas (i.e., 2 and 4.4 acres) would require about 200 and 1000 feet of overland travel on specifically designated (flagged) routes. These small treatments would require a single entrance and exit by the equipment (no treatment) and the routing would strictly avoid any swale or channel habitats. Project implementation would be scheduled to limit the disturbance of late-summer sage-grouse broods and avoid disruption of the sage-grouse and muzzleloading and regular rifle elk hunting seasons (i.e., between August 1 and October 1, except September 11-17).

Use of a brushbeater allows the removal and mulching of the taller sagebrush canopy with little disturbance to the soil or herbaceous understory. An additional benefit of brushbeating is that immature and seedling sagebrush plants are not disturbed so sagebrush height and canopy cover will return to desired levels much more quickly than if the area was treated by fire or herbicides. To ensure that this treatment has minimal soil disturbance, equipment operation will not be permitted when muddy conditions exist. These sites will not be seeded after treatment since a sufficient understory of native grasses and forbs already occur at the sites and are not expected to be effectively influenced by the treatment.

*Monitoring and Evaluation***:** Adaptive management requires evaluation of treatments to determine if they are having the desired effect. Monitoring of treatment and control sites prior to treatment and annually after treatment would provide a means to evaluate the effectiveness of the treatment. Control sites would be random locations. To control for differences in grazing regime, control sites would be present in both the Red Rocks and Cricket grazing allotments. Key variables to measure would be sagebrush height and canopy cover, grass height and canopy cover, and forb height and canopy cover. There is currently a multi-year sage-grouse habitat inventory in progress. Evaluation of this treatment would use the same protocol so that results could be compared to other sites across the resource area. Briefly, treatment and control sites would be evaluated at permanent transects using: 1) a line transect to measure sagebrush canopy cover, 2) Daubenmire plots to measure grass and forb cover, and 3) Robel pole readings to measure vertical cover. Additionally, the presence of sage-grouse at the sites will be determined by looking for roosts, nests, or droppings along a one-meter belt along the transect line. BLM intends on annually monitoring the redevelopment of sagebrush habitat characteristics on representative treatment sites until functional sage-grouse nest habitat is regained.

Mitigation Measures:

1. All persons in the area who are associated with this project must be informed that if anyone is found disturbing historic, archaeological, or scientific resources, including collecting artifacts, the person or persons will be subject to prosecution.

2. The BLM authorized officer must be notified, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Activities must stop in the vicinity of the discovery and the discovery must be protected for 30 days or until notified to proceed by the authorized officer.

3. If in connection with operations under this contract the project proponent, his contractors, subcontractors, or the employees of any of them, discovers, encounters or becomes aware of any objects or sites of cultural or paleontological value or scientific interest such as historic or prehistoric ruins, graves or grave markers, fossils, or artifacts, the proponent shall immediately suspend all operations in the vicinity of the cultural or paleontological resource and shall notify the BLM authorized officer of the findings. Operations may resume at the discovery site upon receipt of written instructions and authorization by the authorized officer.

4. Treatment will not take place during the sage-grouse and muzzleloading elk seasons (Sept. 11-17, 2006) or during the regular rifle elk season (on and after Oct. 1, 2006).

5. All equipment used for project implementation must be washed and free of mud or debris, to prevent introduction of noxious weed propogules, prior to moving equipment onto public lands. Monitor the project areas for noxious weeds and eradicate infestations utilizing materials and methods approved by BLM.

6. Equipment shall not be operated when the ground is muddy or the soil moisture is high enough for equipment to leave ruts over 1.5 inches in height/depth.

7. Channel habitats and swales will be strictly avoided.

8. Permanent monitoring transects will be established prior to treatment and will be evaluated prior to treatment and on an annual basis after treatment (as workloads permit).

9. Vegetation treatment and equipment transport will be confined to those areas specifically delineated with flagging as discussed with prospective bidders during the pre-bid site inspection. BLM will provide the operator with a detailed map of the project site and on-site inspectors as appropriate.

10. Continue to monitor the spotted knapweed infestation on the east boundary of unit 10 and treat accordingly.

11. The structural integrity of all fencelines shall remain intact and functional for the continued control of livestock.

No Action Alternative: No sagebrush habitat manipulation will be conducted.

ALTERNATIVES CONSIDERED BUT NOT CARRIED FORWARD:

Chemical Treatment: Using herbicides to kill tall stands of sagebrush with minimal soil disturbance was considered but eliminated as a possible treatment. Depending on application rate, both 2,4-D and tebuthiuron can kill or injure the critical forb understory. While application of tebuthiuron at reduced rates may remove sagebrush without harm to the herbaceous understory, there is currently no empirical data on what response these chemical treatments have on sage-grouse. Finally, herbicide treatment would include the removal of immature and seedling sagebrush plants and would result in an increased recovery time for the sagebrush canopy compared to mechanical treatment.

Prescribed Burn Treatment: Using a prescribed burn to reduce sagebrush height and canopy cover was considered but eliminated as a possible treatment. First, it is always a possibility that a prescribed burn may encroach on areas where treatment is not needed. Secondly, fire tends to burn best in sagebrush with a good understory and that would eliminate existing sage-grouse nest sites in an attempt to create future nest sites. Finally, a fire treatment would include the removal of immature and seedling sagebrush plants and would result in an increased recovery time for the sagebrush canopy compared to mechanical treatment.

NEED FOR THE ACTION: Compared to most gallinaceous birds, sage-grouse have high annual survival rates but low reproductive rates. The percentage of hens that initiate nests can vary widely. In Oregon, nest initiation rates changed from 78% of hens nesting to 99% of hens nesting. The increase in nest initiation rates may be due to improved range conditions that resulted in improved maternal nutrition. Nest success can also vary widely among populations. Predation can be a major reason for nest failure but increased herbaceous cover at nest sites can reduce predation rates presumably by providing scent, visual, and physical barriers. Simply providing stands of sagebrush doesn't necessarily provide sage-grouse with good nesting and early brood-rearing habitat. If critical components of productive nesting habitat are lacking in the area around leks, it is important to initiate management practices that will result in the enhancement of those habitats. Brushbeating potential nesting habitat where there is tall (>100 cm [39 in]) sagebrush present will help to improve those habitats by reducing the height of sagebrush and increasing the grass and forb cover. Immediately after treatment, the treated sites will have sagebrush too short to use as nest sites. However, they are currently unsuitable as nests sites and as the sagebrush recovers over time, the treated sites would provide good nesting habitat in the future. Sage-grouse typically nest under the tallest sagebrush plants in a stand so sites that contain tall sagebrush plants are unlikely to improve in terms of sage-grouse nesting habitat without treatment.

PLAN CONFORMANCE REVIEW: The Proposed Action is subject to and has been reviewed for conformance with the following plan (43 CFR 1610.5, BLM 1617.3):

Name of Plan: White River Record of Decision and Approved Resource Management Plan (ROD/RMP).

Date Approved: July 1, 1997

Decision Number/Page: 2-10, 2-31 through 2-33

Decision Language: "Sustain a landscape composed of plant community mosaics that represent successional stages and distribution patterns that are consistent with natural and regeneration regimes, and compatible with the goals identified in Standard Three of the Standards for Public Land Health" (2-10).

Suitable sage grouse habitats will be enhanced by manipulating suboptimal sagebrush stands, or converting stands with undesirable composition to suitable cover types (2-31)

"Restore, maintain, or enhance habitat conditions and features conductive to the maintenance or expansion of native grouse populations" (2-31)

"Treatment areas should be interspersed with equal or larger intervals of suitable cover. Cumulative adverse manipulations will not be allowed to exceed 10 percent of suitable nesting habitat within two miles of a lek." (2-32)

AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES / MITIGATION MEASURES:

STANDARDS FOR PUBLIC LAND HEALTH: In January 1997, Colorado Bureau of Land Management (BLM) approved the Standards for Public Land Health. These standards cover upland soils, riparian systems, plant and animal communities, threatened and endangered species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands. Because a standard exists for these five categories, a finding must be made for each of them in an environmental analysis. These findings are located in specific elements listed below:

CRITICAL ELEMENTS

AIR QUALITY

Affected Environment: The entire White River Resource area has been classified as either attainment or unclassified for all pollutants, and most of the area has been designated prevention of significant deterioration (PSD) class II. The proposed action is located no further than 2 miles

west and southwest of Dinosaur Natl. Monument which is a Class II airshed with special designations regarding visibility. The air quality criteria pollutant likely to be most affected by the proposed actions is the level of inhalable particulate matter, specifically particles ten microns or less in diameter (PM_{10}) associated with fugitive dust along native surfaced access roads. No air quality monitoring data is available for the project area. However, it is apparent that current air quality near the proposed location is good the Colorado Air Pollution Control Division (APCD) estimates the maximum PM_{10} levels (24-hour average) in rural portions of western Colorado to be near 50 micrograms per cubic meter ($\mu g/m^3$). This estimate is well below the National Ambient Air Quality Standard (NAAQS) for PM_{10} (24-hour average) of 150 $\mu g/m^3$.

Environmental Consequences of the Proposed Action: Impacts are not anticipated from the proposed action.

Environmental Consequences of the No Action Alternative: None

Mitigation: None

CULTURAL RESOURCES

Affected Environment: There are no recorded sites in the project area. A Class III pedestrian survey in 15 meter transects was completed the week of July 10, 2006 by a White River Field Office Archaeologist. Three large lithic scatters were recorded and mapped. The Wildlife Biologist decided to exclude the area of the scatters from the project area. In excluding this area from the project all cultural resources will be avoided.

Environmental Consequences of the Proposed Action: Impacts are not anticipated from the proposed action.

Environmental Consequences of the No Action Alternative: None

Mitigation: Areas possessing cultural values, including a suitable buffer, would remain untreated and outside the perimeter of the treatment unit so as to remain inconspicuous. The following mitigation measures will be followed during construction, operation, and maintenance of the project:

- All persons in the area who are associated with this project must be informed that if anyone is found disturbing historic, archaeological, or scientific resources, including collecting artifacts, the person or persons will be subject to prosecution.
- The BLM authorized officer must be notified, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Activities must stop in the vicinity of the discovery and the discovery must be protected for 30 days or until notified to proceed by the authorized officer.
- If in connection with operations under this contract the project proponent, his contractors, subcontractors, or the employees of any of them, discovers, encounters or

becomes aware of any objects or sites of cultural or paleontological value or scientific interest such as historic or prehistoric ruins, graves or grave markers, fossils, or artifacts, the proponent shall immediately suspend all operations in the vicinity of the cultural or paleontological resource and shall notify the BLM authorized officer of the findings. Operations may resume at the discovery site upon receipt of written instructions and authorization by the authorized officer.

INVASIVE, NON-NATIVE SPECIES

Affected Environment: The proposed action is located within 115 acres of a Deep Loam Ecological site, 30 acres of a Stoney Loam ecological site, and 8.5 acres of a Sandy Foothills ecological site which is dominated by Mountain big sagebrush/grass community. The understory of this shrub type is dominated by diverse component of perennial grasses and forbs (see table below).

Ecological Site	Plant Community Appearance	Predominant Plant Species in the Plant Community
Deep Loam	Sagebrush / Grass Shrubland	Mountain big sagebrush, serviceberry, snowberry, bitterbrush, western wheat grass, Needle and Thread grass, squirreltail, June grass, Mutton grass, and Eriogonum
Stoney Loam	Sagebrush / Grass Shrubland	Mountain big sagebrush and black sagebrush, snowberry, bitterbrush, western wheat grass, Needle and Thread grass, squirreltail, June grass, Sandberg bluegrass, and Eriogonum
Sandy Foothills	Sagebrush / Grass Shrubland	Mountain big sagebrush, serviceberry, snowberry, bitterbrush, western wheat grass, Needle and Thread grass, squirreltail, June grass, Mutton grass, and Eriogonum

Cheatgrass is an undesirable, annual, invasive, and non-native plant which is common along roads and scattered throughout the vegetation community within the locality of the proposed action. Approximately 20 acres of unit 10 on the north end of the unit has the worst infestation of cheatgrass however, this portion of the unit has been omitted from treatment due to coincident cultural sites situated with that portion of the unit. Cheatgrass is highly adapted to disturbed soils. Spotted knapweed has been located on the two-track which forms the east boundary of unit 10.

Environmental Consequences of the Proposed Action: Activities associated with the proposed action will not cause soil disturbances nor eliminate established perennial vegetation. The scattered infestations of cheatgrass may be temporarily released from competition after the sagebrush canopy has been thinned however, the resultant release from competition of the native understory will actively compete with cheatgrass and hold infestations at current levels or decrease its presence within the community. The spotted knapweed identified on the east boundary of unit 10 has been reported to BLM range staff, treated using mechanical methods and will be monitored prior to any actions associated with the proposed action.

Environmental Consequences of the No Action Alternative: None

Mitigation: All equipment used for project implementation must be washed and free of mud or debris, to prevent introduction of noxious weed propogules, prior to moving equipment onto public lands. Monitor the project areas for noxious weeds and eradicate infestations utilizing materials and methods approved by BLM.

Continue to monitor the spotted knapweed infestation on the east boundary of unit 10 and treat accordingly.

MIGRATORY BIRDS

Affected Environment: A variety of migratory songbirds, including Brewer's sparrows (*Spizella breweri*), sage thrashers (*Oreoscoptes montanus*), vesper sparrows (*Pooecetes gramineus*), and green-tailed towhees (*Pipilo chlorurus*), breed in sagebrush stands. Of these, the Brewer's sparrow is considered by the Colorado Partners in Flight (PIF) program to have a high conservation interest.

Environmental Consequences of the Proposed Action: The proposed action would remove tall, dense sagebrush stands by brushbeating in late summer. The actual brushbeating would not disturb nesting birds since most migratory songbirds have fledged by July.

Brewer's sparrow nest placement varies across its range with average nest height ranging from 16.5 cm (6.5 in) to 44 cm (17 in) above the ground (Rotenberry et al. 1999). The proposed action would cut sagebrush to a height of 20-25 cm (8-10 in). In the short-term, brushbeating may remove some potential nest sites by removing tall sagebrush stands but it is not likely to have a significant adverse impact on Brewer's sparrow populations. Brewer's sparrows require contiguous stands of sagebrush for breeding and the Colorado Partners in Flight (2000) recommends maintaining sagebrush stands no smaller than 12 ha (30 acres). The proposed action would remove a relatively minor amount of sagebrush in the area (see sage-grouse discussion in the special status species section) and it would be spread across the landscape in a mosaic of treated and untreated parcels.

Environmental Consequences of the No Action Alternative: The no action alternative would not have any adverse impacts on the nest success of migratory birds in the project area.

Mitigation: None.

THREATENED, ENDANGERED, AND SENSITIVE ANIMAL SPECIES (includes a finding on Standard 4)

Affected Environment: There are no animals either listed or proposed for listing under the Endangered Species Act that inhabit the project area. The greater sage-grouse (*Centrocercus urophasianus*, hereafter "sage-grouse"), a BLM sensitive species, breeds in the area. There is one known active lek within the project area and the area surrounding the lek is used for nesting and brood rearing.

Environmental Consequences of the Proposed Action: The proposed action would remove tall, dense sagebrush stands by brushbeating in late summer. The actual brushbeating is not likely to disturb nesting sage-grouse hens since, in Colorado, most first nests hatch by late May (Schroeder 1999). Mowing in alfalfa fields has been known to cause significant juvenile mortality (Rowland 2004) but it is unlikely that brushbeating would cause juvenile mortality since the treatment would not occur until August. Juvenile sage-grouse are relatively strong fliers by 5 weeks of age (late June) and should be able to move out of the area when the treatment begins. The treatment is not likely to cause disturbance to broods since the treatment is timed to occur when broods typically break-up (10-12 weeks post-hatching) (Schroeder 1999).

The proposed action is intended to benefit greater sage-grouse populations by treating tall, dense sagebrush stands in order to increase herbaceous ground cover and allow the redevelopment of suitable nesting conditions in the long-term. Sage-grouse typically nest under sagebrush that is 40-80 cm (16-32 in) tall with a minimum forb canopy cover of 10% (Connelly et al. 2000). The proposed action would restore sagebrush stands >100 cm (39 in) tall by cutting it to a height of 20-25 cm (8-10 in). In the short-term, these areas would be unsuitable as nest sites. However, the selected treatment areas were chosen because they are currently unsuitable as nesting habitat primarily due to limited visual obstruction of the nest since the shrub canopy is so high and due to a degraded understory. Even when mechanical treatments are recommended for the restoration of sagebrush stands, it is important to consider that it may take as long as 20 years before the area has recovered to the extent that it is suitable nesting habitat. It is recommended that no more than 20% of the breeding habitat be treated within a 20-year period (Connelly et al. 2000). Land use decisions within the White River Resource Area RMP are even more conservative and limit cumulative adverse manipulations to less than 10% of suitable nesting habitat within 3.2 km (2 miles) of a lek. There are approximately 1,654 ha (4,086 acres) of sagebrush on the White River Resource Area that is within 3.2km (2 mi) of an active lek in the project area. Approximately 64 ha (159 acres) of sagebrush has been previously removed by herbicide on private land. The proposed action would treat approximately 63 ha (156 acres) of sagebrush. The cumulative impact on sagebrush within 3.2 km (2 mi) of an active lek would be less than 8% of available sagebrush habitat. Since it only includes sagebrush habitat on the White River Resource area (the project area borders the Vernal Resource Area), this is a conservative estimate.

Environmental Consequences of the No Action Alternative: Under the no-action alternative, no sagebrush stands would be cut by brushbeating. When a critical habitat is in need of restoration, no action can be more damaging in the long run than the proposed action. Since sage-grouse typically nest under the tallest shrubs in a stand, the treatment parcels are unlikely to increase in utility if left untreated. Because it takes so long for sagebrush to recover after treatment, it is critical to treat small patches once they lose their suitability for nesting in order to maintain a mosaic of different aged sagebrush stands in the immediate area surrounding a lek.

Mitigation: None.

Finding on the Public Land Health Standard for Threatened & Endangered Species (Standard 4): Standard 4 requires the BLM to protect habitat for threatened, endangered, or sensitive species. Greater sage-grouse use the project area for breeding, nesting, and brood rearing. There is one active lek, Stateline-Stuntz Lek, within the project area and broods have

been observed in sagebrush stands surrounding Stuntz Reservoir. The area currently meets the standard of managing habitat for sensitive species. The proposed action is designed so that the area will continue to meet that standard in the future by treating tall, dense sagebrush stands that have lost their utility as sage-grouse nesting habitat.

THREATENED, ENDANGERED, AND SENSITIVE PLANT SPECIES (includes a finding on Standard 4)

Affected Environment: The narrowleaf evening primrose (*Oenothera autissima*), a BLM sensitive plant species, it is found in eastern Utah and western Colorado, including drainages immediately around Stuntz Reservoir. On April 14, 2006 the Center for Native Ecosystems and the Colorado Native Plant Society petitioned the U.S. Fish and Wildlife Service to list the narrrowleaf evening primrose under the Endangered Species Act citing concerns about grazing and trampling by cattle, habitat destruction from off-road vehicle use and competition with invasive weeds. Currently this species is listed as a BLM sensitive species.

Environmental Consequences of the Proposed Action: The proposed action would not have any conceivable impact on the narrowleaf primrose. This species is restricted to patches of sandy gravelly soil in shallow basins or drainage bottoms or rock crevices in grass-forb meadows or open areas. The proposed action focuses on treating tall dense stands of sagebrush and is specifically designed to avoid the habitat where this species occurs. On June 28 and July 3, 2006, Heather Sauls, BLM Wildlife Biologist, performed a pedestrian survey in all drainages and swales potentially influenced by this project. The locations are not open areas rather they are rocky meadows with dense sagebrush stands. The only species of primrose found at the locations were the yellow evening primrose (*Oenthera flava*). Narrowleaf evening primrose can be distinguished from the yellow primrose by flower size, leaf shape and size, and capsule size (CNE et al. 2006, Goodrich and Neese 1986). The proposed action would not impact the narrowleaf evening primrose populations since the project does not involve suitable habitat and contains appropriate mitigation.

Environmental Consequences of the No Action Alternative: None

Mitigation: None

Finding on the Public Land Health Standard for Threatened & Endangered species: There is no reasonable likelihood that the proposed action or no action alternative would have an influence on the condition or function of Threatened, Endangered, or Sensitive plant species provided that the proposed action is followed. Thus there would be no effect on achieving the land health standard.

WASTES, HAZARDOUS OR SOLID

Affected Environment: Hazardous or solid wastes are not expected to be a part of the affected environment. However, these materials my accidentally be introduced in the

environment through the implementation of the proposed action. Fuel, oil, grease, and antifreeze are all associated with vehicles and equipment associated with implementing the proposed action, but would only be introduced into the environment because of equipment failure. Minute loss of these materials through normal operation of equipment, maintenance and fueling procedures are not considered spills. Spills are generally defined as the loss of large quantities of these materials into the environment and are determined to be a spill on a case-by-case basis.

Environmental Consequences of the Proposed Action: For any given accident or incident involving hazardous materials, consequences will be dependent on the volume and nature of the incident and material released. Short term impacts such as contaminations of soils, vegetation, and surface water could occur. Considering the nature of the proposed action (i.e., operation of equipment designed for off-road work), the short timeframes involved (i.e., 4-5 days), and gentle terrain, it would be improbable that substantive release of such materials would occur.

Environmental Consequences of the No Action Alternative: No hazardous wastes would be introduced into the environment under the no action alternative.

Mitigation: None

WATER QUALITY, SURFACE AND GROUND (includes a finding on Standard 5)

Affected Environment: The proposed actions are located within stream segments 14 and 20 of the Lower Yampa/Green River Basin. The affected watershed in stream segment 14 is an unnamed ephemeral tributary to Sand Canyon which is a tributary to the Yampa River. Affected watersheds within stream segment 20 are Pool Creek and Iron Spring Wash. Iron Springs Wash is a tributary to Pool Creek which is a tributary to the Green River. The Yampa River is a tributary to the Green River which is a tributary to the Colorado River. All of the proposed brushbeating activities are situated in areas of low relief high in the drainage basins and away from channel habitat.

The "Status of Water Quality in Colorado –2006" (CDPHE 2006b) and Regulation No. 37 Classifications and Numeric Standards for Lower Colorado River Basin (CDPHE 2005a) were reviewed for information relating to drainages impacted by the proposed action. Stream segment 14 of the Lower Yampa/Green River Basin is defined as all tributaries to the Yampa River including all wetlands, lakes, and reservoirs from a pint immediately below the confluence with Lay Creek to a point immediately below the confluence with the Little Snake River, except for specific listings in segments 17a, 17b and 18. State has classified stream segment 14 as "Use Protected". The antidegredation review requirements in the Antidegredation Rule are not applicable to waters designated use-protected. For those waters, only the protection specified in each reach will apply. Stream segment 14 has been further designated by the state as being beneficial for the following uses: Warm Aquatic Life 2, Recreation 2, and Agriculture (CDPHE, 2006b).

Stream segment 20 of the Lower Yampa/Green River basin is defined as all tributaries to the Green River in Colorado, including all wetlands, lakes and reservoirs except for the specific

listings in segments 21 and 22; all tributaries to the Yampa River from a point immediately below the confluence with the Little Snake River to the confluence with the Green River, except for the specific listings in segments 15 through 18. State has classified stream segment 20 as "Use Protected". The antidegredation review requirements in the Antidegredation Rule are not applicable to waters designated use-protected. For those waters, only the protection specified in each reach will apply. Stream segment 20 has been further designated by the state as being beneficial for the following uses: Warm Aquatic Life 2, Recreation 1a, and Agriculture (CDPHE, 2006b).
Newly promulgated Colorado Regulations Nos. 93 and 94 (CDPHE 2006c and 2006d, respectively) were reviewed for information related to the proposed project area drainages. Regulation No. 93 is the State's Section 303(d) list of water-quality-limited segments requiring Total Maximum Daily Loads (TMDLs). The 2006 303(d) list of segments needing development of TMDLs did not include any stream segments in the Lower Yampa/Green River Basin. Regulation 94 is the State's list of water bodies identified for monitoring and evaluation, to assess water quality and determine if a need for TMDLs exists. The list includes one segment within the Lower Yampa/Green River - segment 2, Yampa River from Lay Creek to the Green River (for impairment from sediment). Stream segments 14 and 20 were not listed.

No springs or water wells have been identified within 200 meters of the proposed actions.

Environmental Consequences of the Proposed Action: As outlined in the proposed action, the use of a brushbeater allows the removal and mulching of taller sagebrush canopy while the soil and herbaceous understory is left intact. Treatment areas are small, activities will cease when soils become saturated, and channel habitats and swales will be strictly avoided. Thus, no adverse environmental consequences to water quality are anticipated from implementation of the proposed action.

Environmental Consequences of the No Action Alternative: None

Mitigation: Follow mitigation outlined in the proposed action.

Finding on the Public Land Health Standard for water quality: Stream segments 14 and 20 of the Lower Yampa/Green River Basin currently meet water quality standards set by the state. Many of the upper tributaries which are ephemeral and flow in direct response to storm events do not meet the standards during periods of flow. Implementation of the proposed action will not change this status.

CRITICAL ELEMENTS NOT PRESENT OR NOT AFFECTED:

No flood plains, riparian/wetland areas, Areas of Critical Environmental Concern, Wilderness Study Areas, prime and unique farmlands, or Wild and Scenic Rivers exist within the area affected by the proposed action. There are also no Native American religious or environmental justice concerns associated with the proposed action.

NON-CRITICAL ELEMENTS

The following elements **must** be addressed due to the involvement of Standards for Public Land Health:

SOILS (includes a finding on Standard 1)

Affected Environment: The following table describes the soils found within the Blue Mountain mechanical treatment units as mapped and described within the Moffat County Soil Survey.

Soil Unit Name	Ecological Site	Water Erosion	Acres
Emlin loam,1-12%slopes	Deep Loam	Moderate	115.18
Layoint-Moosed-Berlake Complex,1-20%slopes	Sandy Foothills-Deep Loam	Slight-Moderate	8.51
Rencot-Duffymont Complex,1-25%slopes	Stoney Loam	Moderate	30.19

All soils mapped within the proposed mechanical treatments were derived from either limestone or sandstone parent material. The Emlin Loam soils are in a deep loam range site where the permeability of this soil is moderately slow, the available water capacity is high, and water runoff is medium. The hazard of wind erosion is moderate and the effective rooting depth is 60 inches or more.

The Layoint-Moosed-Berlake complex is comprised of 35% Layoint soil, 25% Moosed soil, and 20% Berlake soils with 10% sandy Maybell soils in drainage ways and 10% sandy soils on convex summits and is either a deep loam or sandy foothills range site. Permeability of this complex is moderately rapid and available water capacity is low-very low. The hazard of wind erosion is high and the effective rooting depth ranges from 7-60 inches or more.

The Rencot-Duffymont complex is comprised of 55% Rencot soil, 35% Duffymont soils, and about 5% Maudlin soils and 5% rock outcrop and is described as a stoney loam range site. The permeability of this complex ranges from moderate to moderately rapid with very low water capacities wit slow to medium runoff rates. The hazard of wind erosion is slight and the effective rooting depth ranges from 4-20 inches.

The soils within the project area have sufficient litter and understory vegetation to prevent overland flows and pedestaling. There are no rills or actively-eroding gullies present within or adjacent to the project area.

Environmental Consequences of the Proposed Action: The effects of mechanical vegetation treatment on soils is directly related to the amount of vegetation disturbance or removal exposing soils to wind and water erosion. The proposed sagebrush treatment will only remove the upper layer canopy of sagebrush. All shrubs below 8-10 inches in height will be untreated and therefore undamaged by the proposed action. It is anticipated that no understory grasses or forbs will be damaged by the brushbeater removing woody shrubs. The litter generated from the mulching of sagebrush and other woody species will add to the litter accumulation already present within the proposed treatment units. The proposed action will positively impact soils by increasing the litter accumulation, while leaving the understory

entirely intact and retaining an unknown percentage of sagebrush canopy which will collectively provide adequate soil protection from erosional processes. It is also expected that the removal of some sagebrush canopy will increase understory production and canopy cover which will also aid in soil protection until the sagebrush returns to a density capable of out competing understory species.

Environmental Consequences of the No Action Alternative: There would be no direct impact to soils under this alternative.

Mitigation: Equipment shall not be operated when the ground is muddy or the soil moisture is high enough for equipment to leave ruts over 1.5 inches in height/depth.

Finding on the Public Land Health Standard for upland soils: Soils within the treatment units are currently meeting Public Land Health Standards. The implementation of the proposed action will further aid in soils meeting Public Land Health Standards.

VEGETATION (includes a finding on Standard 3)

Affected Environment: The proposed action is located within 115 acres of a Deep Loam Ecological site, 30 acres of a Stoney Loam ecological site, and 8.5 acres of a Sandy Foothills ecological site which is dominated by Mountain big sagebrush/grass community. The entire project area falls within a 15-18 inch precipitation zone and the sites are very productive and diverse. The primary sagebrush species is Mountain Big Sagebrush (*Artemisia tridentata var. vaseyana*) with some limited and scattered Black Sagebrush (*Artemisia nova*) found on shallow rocky soils. There is a minor component of Basin Big sagebrush (*Artemisia tridentata var. tridentata*) primarily relegated to drainages and serviceberry (*Amelanchier utahensis*) sparsely scattered throughout the treatment units.

Ecological Site	Plant Community Appearance	Predominant Plant Species in the Plant Community
Deep Loam	Sagebrush / Grass Shrubland	Mountain big sagebrush, serviceberry, snowberry, bitterbrush, western wheat grass, Needle and Thread grass, squirreltail, June grass, Mutton grass, and Eriogonum
Stoney Loam	Sagebrush / Grass Shrubland	Mountain big sagebrush and black sagebrush, snowberry, bitterbrush, western wheat grass, Needle and Thread grass, squirreltail, June grass, Sandberg bluegrass, and Eriogonum
Sandy Foothills	Sagebrush / Grass Shrubland	Mountain big sagebrush, serviceberry, snowberry, bitterbrush, western wheat grass, Needle and Thread grass, squirreltail, June grass, Mutton grass, and Eriogonum

The understory of the project area is dominated by western wheatgrass (*Agropyron smithii*), mutton bluegrass (*Poa fendleriana*), June grass (*Koeleria cristata*), needle and thread (*Stipa comata*), and Indian Rice grass (*Oryzopsis hymenoides*). The project area also supports a diverse component of forbs of which *Eriogonum umbellatum*, pussytoes (*Anternarria parvifolia)*, arrowleaf balsamroot (*Balsamorhiza sagittata*), and *senecio ssp.* are the most dominant.

Cheatgrass (*Bromus tectorum*) is an undesirable, annual, invasive, and non-native plant which is present along roads and scattered within the locality of the proposed action.

Environmental Consequences of the Proposed Action: The proposed action will remove the upper canopy layer of sagebrush and other shrubs that are > 8-10 inches above the soil surface. Sagebrush that is < 8 inches in height will be left untreated reducing the canopy cover of sagebrush by approximately 80-90% on 156 acres. The large rubber tires of the tractor and the height at which the mower will be maintained will preempt surface disturbance and not cause damage to understory species. The timing of the project will allow for treatment when most understory species are dormant which will also minimize damage to understory species. The removal of the sagebrush canopy will release much of the understory from competition and allow an even greater expression of the understory which will increase overall herbaceous ground cover and production. This increase in herbaceous productivity can be expected for a minimum of 10 years post treatment until sagebrush canopy cover reaches a density capable of suppressing herbaceous expression. Cheatgrass while present is not dominate within any of the identified treatment units with the exception of the northern portion of unit 10, this portion of the unit has been omitted from treatment due to coincident cultural sites situated within that portion of the unit. The scattered infestations of cheatgrass may be temporarily released from competition after the sagebrush canopy has been thinned however, the resultant release from competition of the native understory will actively compete with cheatgrass and hold infestations at current levels or decrease its presence within the community.

Environmental Consequences of the No Action Alternative: None

Mitigation: See soils mitigation.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial)*:* Plant communities within the boundaries of the proposed action currently meet public land health standards. Implementation of the proposed action will further meet land health standards by increasing the mix of age class diversity and achieve a greater variety of successional stages within the Stuntz Ridge sagebrush community.

WILDLIFE, AQUATIC

Affected Environment: There are no perennial streams or springs within the project area. Although associated with an adjoining watershed, a spring-borne portion of Cottonwood Creek represents the nearest perennial stream. This diminutive system supports an invertebrate-based community and is separated from the closest treatment parcel by about 2.4km (1.5 mi). Stuntz Reservoir is approximately 212 m (696 ft) from the boundary of treatment parcel #7. This livestock reservoir supports little bank vegetation and undergoes strong seasonal fluctuations in water levels. Under these constraints, it is likely that this pond would be capable of supporting only aquatic species that do not require complex habitats, such as tiger salamanders (*Ambystoma tigrinum*).

Environmental Consequences of the Proposed Action: There would be no impacts to aquatic wildlife by the proposed action. Enhancing the density and vigor of herbaceous ground cover within contributing drainages would, on an incremental basis, improve those watershed functions that benefit aquatic habitat conditions (e.g., reducing sedimentation and increasing infiltration).

Environmental Consequences of the No Action Alternative: There would also be no impacts to aquatic wildlife if the proposed action was not carried out.

Mitigation: None.

Finding on the Public Land Health Standard for Plant and Animal Communities: See sections on vegetation and terrestrial wildlife.

WILDLIFE, TERRESTRIAL (includes a finding on Standard 3)

Affected Environment: Across western North America at least 100 bird species and 70 mammal species can be found in sagebrush habitats (Paige and Ritter 1999). In Colorado, most sagebrush dependent species that are of conservation concern are either migratory songbirds or greater sage-grouse, both of which have been described in previous sections. Several popular game species as well as two small mammal species of potential concern inhabit the project area.

A variety of game species, including pronghorn (*Antilocapra Americana*), elk (*Cervus elaphus*), mule deer (*Odocoileus heminous*), and blue grouse (*Dendragapus obscurus*), inhabit the project area. Of these, only pronghorn are considered sagebrush obligates (Paige and Ritter 1999) because they depend on sagebrush as a winter forage (O'Gara 1978).

In 2005, the Colorado Division of Wildlife (DOW) commissioned a study to identify declining sagebrush-dependent wildlife species that are currently not covered under other conservation plans. Two small mammals, the sagebrush vole (*Lemmiscus curtatus*) and Merriam's shrew (*Sorex merriami*), were identified as species of potential concern (Boyle and Reeder 2005) due to their association with sagebrush and the limited knowledge of their natural history and population status.

Environmental Consequences of the Proposed Action: While the project area is not considered one of the pronghorn habitat use areas (DOW), pronghorn were observed using the area in the summer and they may use it in the winter as well. Both deer and elk have been observed in the project area in the summer, although the area is predominately used as winter range (DOW). To ensure the availability of winter forage, the RMP recommends that cumulative sagebrush removal be no more than 20% of available sagebrush within a 1 mile radius. A relatively small amount of sagebrush would be removed (see special status species section discussion on sage-grouse) and thus the proposed action is not likely to impact big game species due to a reduction in winter browse availability. The amount of forbs and grass available in the understory should increase in response to the brushbeating treatment which would benefit deer, elk, and pronghorn for several seasons.

Blue grouse have been observed in the summer using the treatment parcels north of Harpers Corner Road. Blue grouse are not sagebrush-obligates and the proposed treatment is unlikely to adversely impact their population. Because the nutritional demands of sage-grouse and blue grouse are similar during the brood-rearing period and require a forage base rich in invertebrates and forbs, the creation of small upland meadows interspersed among remaining sagebrush cover would, on a limited basis, be expected to enhance the availability of these preferred dietary components for blue grouse.

The proposed treatments are scheduled for August or September 2006—this timeframe would avoid all sensitive and important seasonal activity periods (i.e., reproduction, winter season) for resident wildlife.

The proposed action is not likely to adversely impact small mammal populations. Although individual animals would be subjected to adverse habitat modification, these changes would be localized, dispersed, and short term. When sagebrush is removed by prescribed fire, lack of cover is the primary limiting factor for vole and shrew populations (McGee 1982). Restoring sagebrush stands by brushbeating leaves a modest amount of residual cover for small mammal populations since the vegetation is cut to a height of 20-25 cm (8-10 in). However, this form of treatment allows for accelerated redevelopment of a functional sagebrush canopy and, particularly in the case of sagebrush vole, promotes a strong ground cover response as a source of herbaceous forage and cover preferred by this species.

Environmental Consequences of the No Action Alternative: If the proposed action is not implemented there would be no impact to terrestrial wildlife species. However, inaction may lead to long-term declines in sage-grouse populations if critical nesting habitat is not properly managed when necessary (see discussion on Threatened, Endangered, and Sensitive Animal Species).

Mitigation: None.

Finding on the Public Land Health Standard for Plant & Animal Communities (Standard 3): Standard 3 requires BLM to manage public lands so that plant and animal communities remain at viable population levels. The project area currently meets that standard; however it may fail to meet that standard in the future if sagebrush habitats are not managed for greater sage-grouse. The proposed action would cut tall, dense stands of sagebrush and create a mosaic of mixed-age stands which is consistent with the objectives of this standard. Additionally, the proposed action would improve sage-grouse nesting habitat in the future by treating sagebrush stands that have lost their utility as nest sites.

OTHER NON-CRITICAL ELEMENTS: For the following elements, only those brought forward for analysis will be addressed further.

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Access and Transportation			X
Cadastral Survey	X		
Fire Management			X
Forest Management	X		
Geology and Minerals		X	
Hydrology/Water Rights	X		
Law Enforcement		X	
Noise		X	
Paleontology		X	
Rangeland Management			X
Realty Authorizations	X		
Recreation			
Socio-Economics		X	
Visual Resources			X
Wild Horses	X		

ACCESS AND TRANSPORTATION

Affected Environment: The paved Harper's Corner Road bisects the general project area and several unnamed, unnumbered routes are present in the proposed project area.

Environmental Consequences of the Proposed Action: This project would have no influence on public travel along the Harper's Corner Road or any of the unimproved 2-tracks that traverse the project area. Vehicle access associated with the proposed action generally involves the use of existing trails and roads. One treatment unit (#5) requires about 1,000 feet of cross-country access, but the sagebrush will not be treated enroute. One-time ingress and egress by the tractor is not expected to lead to the development of a new way.

Environmental Consequences of the No Action Alternative: None.

Mitigation: None

FIRE MANAGEMENT

Affected Environment: The proposed action falls within the B1 Blue Mountain fire management polygon. This is an area where unplanned wildland fire is not desired due the negative effect an unplanned ignition could have on the sagebrush vegetation type and its obligates. The fuel loads within the sagebrush type can be characterized as heavy due to the size and continuity of the sagebrush with an average of approximately 8.5 tons/acre fuel loading.

Environmental Consequences of the Proposed Action: The proposed action will aid in meeting fire and resource management objectives by mimicking fire disturbances of < 200 acres and promoting vegetative patterns representing a spectrum of successional stages in the continuous sagebrush type. The treatments may also aid in avoiding future large scale involvement of the sagebrush type in the event of a wildfire. Also, 156 acres of fuel reduction will be accomplished as mandated by the national fire plan in an area that could designated as at risk from wildfire due to elevated fuel loading.

Environmental Consequences of the No Action Alternative: None

Mitigation: None

RANGELAND MANAGEMENT

Affected Environment: The proposed mountain sagebrush manipulation occurs within the Red Rocks (06371) and Cricket (06300) allotments. Project parcels #2-4 are located in the north pasture of the Red Rocks allotment which is authorized by Marvin Noel for cattle (65 cows, 08/16-10/04). Parcels #2-4 account for 29.4 acres (18% of total) of mountain sagebrush proposed for treatment within the Red Rocks allotment. Mr. Noel is completely resting the north pasture from livestock use this calendar year and for the 2007 growing season because of a planned prescribed burn this year by Dinosaur National Monument. Therefore, resting the allotment from livestock use will enable the full growth potential of the vegetative understory that will further facilitate seed production, biomass accumulation, and propagation.

BLM's Vernal Field Office (VFO, Utah) manages the Cricket allotment because they control the adjacent grazing permittee in Utah. Project parcels #1 and #5-10 are located in the Cricket allotment and account for 129.1 acres of sagebrush treatment (82% of total). The Cricket allotment is authorized for cattle use during the summer to early fall period. This allotment is divided into pastures that allows for the controlled movement of livestock. Stuntz Reservoir splits two pastures that provides a critical water point for livestock and is located near parcels #5-9 (¼ -1 mile). A pasture fenceline bisects parcel #7.

Environmental Consequences of the Proposed Action: The proposed sagebrush beating will eliminate the over-mature ground cover of mountain sagebrush, thus releasing the grass understory over 158.5 acres. There is a sufficient desired grass understory (e.g. western wheatgrass, needle-and-thread grass, etc.) that provides soil protection and livestock grazing needs. An increase in ground cover of existing grasses will occur after the elimination of sagebrush that is currently dominant and readily competes for limited resources. Therefore, the proposed action will increase the expression of available forage (i.e. grasses) for livestock over an approximate 10-15 year period.

The proposal will increase forage over 158.5 acres that would aid in livestock distribution, lessen overall utilization rates by livestock, and provide ample grazing opportunities for livestock. However, there is a potential for over utilization by livestock in these treatment polygons due to nearby water availability and through the creation of readily available grazing areas. This

potential situation of excessive livestock use would hamper the establishment and recovery rates of desired grasses within the sagebrush manipulation polygons.

Overall, it is anticipated that the current understory of grasses and forbs readily has the ability of fully express itself through desired levels of ground cover to provide for Public Land Health Standards after treatments. The proposed monitoring plan will assist in understanding the role of livestock grazing in relation the proposed action.

Environmental Consequences of the No Action Alternative: The mature stands of mountain sagebrush would continue to dominate the proposed 158.5 acres of treatment within the Red Rocks (29.4 acres) and Cricket (129.1 acres) allotments. This sagebrush community is currently suppressing the grass understory that provides a greater foraging worth for cattle. Thereby, the no action alternative would continue the domination of sagebrush and forgo the opportunity to increase the expression of the grass community, thus lessening foraging opportunities for livestock.

Mitigation: The structural integrity of all fencelines shall remain intact and functional for the continued control of livestock.

RECREATION

Affected Environment: The proposed action occurs within the White River Extensive Recreation Management Area (ERMA), including the Blue Mountain Geographic Reference Area North subunit. BLM custodially manages the ERMA to provide for unstructured recreation activities such as hunting, dispersed camping, hiking, horseback riding, wildlife viewing and off-highway vehicle use. The Blue Mountain GRA is managed to provide specific recreation activity opportunities, including trophy big game and upland bird hunting, mountain biking, scenic viewing, horseback riding, and pleasure driving.

The project areas and the surrounding area has been delineated a Recreation Opportunity Spectrum (ROS) class of Semi-Primitive Motorized (SPM). SPM recreation setting is typically characterized by a natural appearing environment with few administrative controls, low interaction between users but evidence of other users may be present. SPM recreation experience is characterized by a high probability of isolation from the sights and sounds of humans that offers an environment that offers challenge and risk.

Environmental Consequences of the Proposed Action: Implementation of the proposed vegetation treatments would be limited to those dates outside the high-use fall big game and grouse hunting seasons and would not be expected to detract from public hunting opportunity or game distribution.

Project implementation would temporarily and briefly (about 4 days) increase the likelihood of human interactions and the sights and sounds associated with the human environment. As designed, the treatment areas would emulate small burns and would appear consistent with the natural vegetation patterns in the landscape.

Environmental Consequences of the No Action Alternative: None.

Mitigation: None

VISUAL RESOURCES

Affected Environment: The proposed action would be located in an area with a VRM II classification. The objective of this class is to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.

Environmental Consequences of the Proposed Action: The proposed action would only alter the existing height of some of the natural vegetation. The existing character of the landscape would be unchanged. There would be no change in the basic elements of form, line, or color. The basic element of texture would be slightly altered, but should appear not much differently from the varying heights of naturally occurring vegetation types in the area. The proposed action should not attract the attention of a casual observer traveling within view of the proposed action, although the casual observer would be able to detect the different heights of the vegetation. The level of change to the characteristic landscape would be low, and the objectives of the VRM II classification would be retained.

Environmental Consequences of the No Action Alternative: There would be no environmental consequences.

Mitigation: None

CUMULATIVE IMPACTS SUMMARY: There have been a number of sagebrush manipulations conducted in the project vicinity over the past 10 years including recent burns on public lands and sagebrush eradication efforts by adjacent landowners. The further reduction of about 150 acres of sagebrush canopy is not considered to be additive with these events for the following reasons: the sagebrush targeted for treatment is overmature with declining understories and providing only the most limited winter utility for sage-grouse—these conditions warrant successional setback to redevelop strong understory expression and sagebrush plants with a conformation that serves as functional sage-grouse habitat. Too, the treatment areas are small and widely dispersed and the methods employed for treatment allow for accelerated recovery of sagebrush canopies from existing seedling stock.

REFERENCES CITED:

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PERSONS / AGENCIES CONSULTED: The BLM wildlife staff coordinated project technique, extent, and distribution with Brad Petch, the Colorado Division of Wildlife's Northwest Region's Conservation Biologist. The staff also consulted with Dinosaur National Monument's assistant chief law enforcement officer, explaining project intent and ensuring that Monument staff had no issues with equipment transport on, or visual characteristics from the Harper's Corner Road.

INTERDISCIPLINARY REVIEW:

Name	Title	Area of Responsibility
Nate Dieterich	Hydrologist	Air Quality
Tamara Meagley	Natural Resource Specialist	Areas of Critical Environmental Concern
Tamara Meagley	Natural Resource Specialist	Threatened and Endangered Plant Species
Gabrielle Elliott	Archeologist	Cultural Resources Paleontological Resources
Ken Holsinger	Natural Resource Specialist	Invasive, Non-Native Species
Heather Sauls	Wildlife Biologist	Migratory Birds
Heather Sauls	Wildlife Biologist	Threatened, Endangered and Sensitive Animal Species, Wildlife
Ed Hollowed	Wildlife Biologist	Wastes, Hazardous or Solid
Nate Dieterich	Hydrologist	Water Quality, Surface and Ground Hydrology and Water Rights
Ed Hollowed	Wildlife Biologist	Wetlands and Riparian Zones
Ed Hollowed	Wildlife Biologist	Wilderness
Ken Holsinger	Natural Resource Specialist	Soils
Ken Holsinger	Natural Resource Specialist	Vegetation
Heather Sauls	Wildlife Biologist	Wildlife Terrestrial and Aquatic
Ed Hollowed	Outdoor Recreation Planner	Access and Transportation
Ken Holsinger	Natural Resource Specialist	Fire Management
Bob Fowler	Forester	Forest Management
Paul Daggett	Mining Engineer	Geology and Minerals
Jed Carling	Rangeland Management Specialist	Rangeland Management
Penny Brown	Realty Specialist	Realty Authorizations
Ed Hollowed	Outdoor Recreation Planner	Recreation
Keith Whitaker	Natural Resource Specialist	Visual Resources
Melissa Kindall	Natural Resource Specialist	Wild Horses

Finding of No Significant Impact/Decision Record (FONSI/DR)

CO-110-2006-197-EA

FINDING OF NO SIGNIFICANT IMPACT (FONSI)/RATIONALE: The environmental assessment and analyzing the environmental effects of the proposed action have been reviewed. The approved mitigation measures (listed below) result in a Finding of No Significant Impact on the human environment. Therefore, an environmental impact statement is not necessary to further analyze the environmental effects of the proposed action.

DECISION/RATIONALE: It is my decision to approve implementation of the Cricket Greater Sage-Grouse Nesting Habitat Enhancement project as described in the proposed action. Brushbeating potential sagebrush nesting habitat as proposed will have a positive impact on the conservation of sage-grouse in the White River Field Office area.

MITIGATION MEASURES:

Mitigation has been integrated into the proposed action.

COMPLIANCE/MONITORING: Heather Sauls, WRFO Wildlife Biologist

NAME OF PREPARER: Heather Sauls, WRFO Wildlife Biologist

NAME OF ENVIRONMENTAL COORDINATOR: Caroline Hollowed

SIGNATURE OF AUTHORIZED OFFICIAL: Kent E. Walter
Field Manager

DATE SIGNED: 08/08/06

ATTACHMENTS: General project location map (Figure 1) and location of treatment parcels within the project area (Figure 2).

CO-110-2006-197-EA 24

Figure 1. Access to Blue Mountain Sagebrush Treatment Project

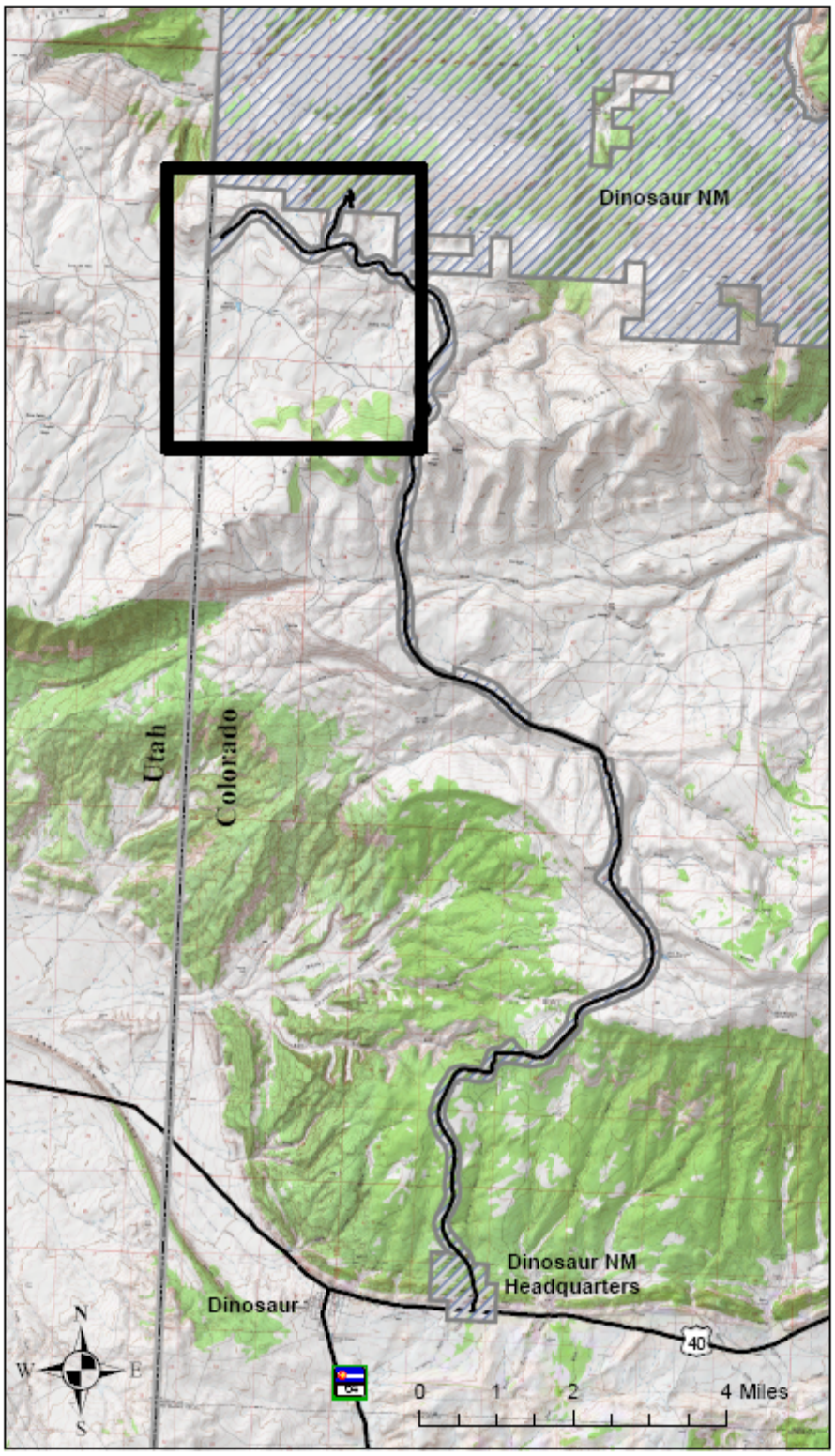

Figure 2. Location of Blue Mountain Sagebrush Treatment Parcels